

Service Manual

Microwave Oven

NN-3559, NN-3809
NN-3859, NN-3959



Specifications

Power Source :	220 V AC Single Phase 50 Hz
Power Requirement :	1,400 W.....Microwave 1,800 W.....Heater
Output :	750 W.....Full Microwave Power
Microwave Frequency :	2,450 MHz
Timer :	99 Min. 99 Sec./9 Hr. 99 Min.
Outside Dimensions :	558 mm (W) × 450 mm (D) × 390 mm (H)
Oven Cavity Dimensions :	367 mm (W) × 372 mm (D) × 232 mm (H)
Weight :	29 kg
Specifications subject to change without notice.	

Panasonic

Matsushita Electric Industrial Co., Ltd.

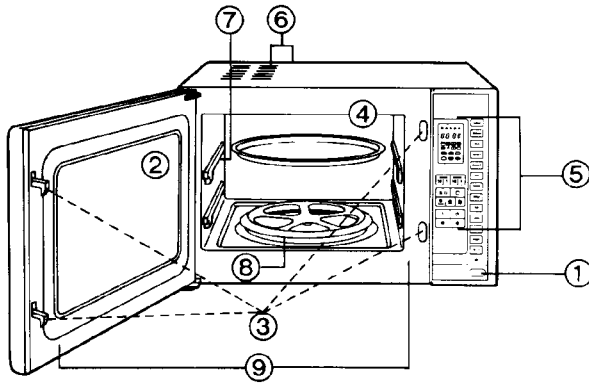
Central P.O. Box 288, Osaka 530-91, Japan

FEATURE CHART

MODEL			
FEATURE	NN-3559	NN-3809 NN-3859	NN-3959
CYCLIC DEFROST	○	○	○
THREE STAGE COOKING	○	○	○
AUTO REHEAT	○	—	—
AUTO WEIGHT DEFROST	○	—	—
AUTO WEIGHT	○	—	—
AUTO PROGRAM COOKING (12 CATEGORY)	—	○	○
COMBINATION — TIME COOKING	○	○	○
CONVECTION — AUTO PREHEATING	○	○	○
CONVECTION — TIME COOKING	○	○	○
CONVECTION — 2 LEVEL COOKING	○	○	○
GRILL — AUTO PREHEATING	○	○	○
GRILL — TIME COOKING	○	○	○
DELAY/STAND	○	○	○
DIGITAL CLOCK	○	○	○
PERO CLEAN FILTER	—	○	○
BREAD MAKING	—	—	○

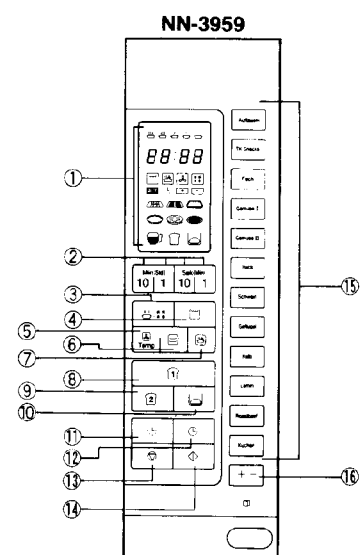
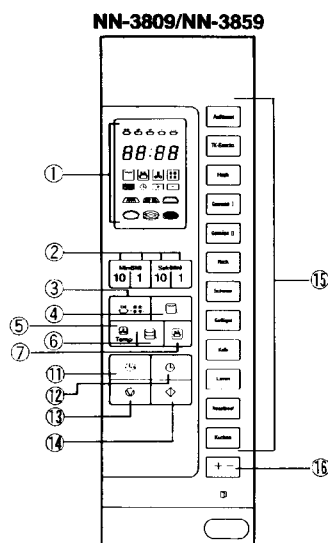
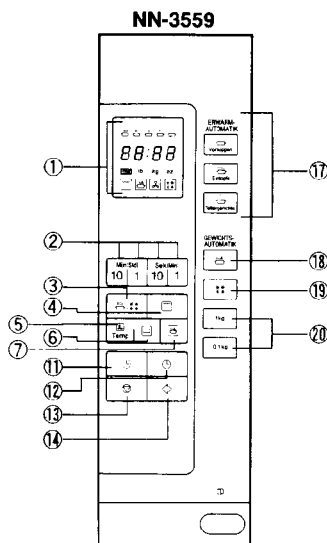
FEATURE DIAGRAM & CONTROL PANEL

Feature Diagram



- ① Door Release
- ② Oven Window
- ③ Door Safety Lock System
- ④ Oven Air Vents
- ⑤ Control Panel
- ⑥ External Oven Air Vents
- ⑦ Slide in Shelf Guides
- ⑧ Turntable
- ⑨ Door Seal

Control Panel



- ① Display Window
- ② Time Pads
- ③ Power Pad
- ④ Grill Pad
- ⑤ Convection-Temp Pad
- ⑥ Convection-2 Level Pad
- ⑦ Combination Pad

- ⑧ Bread 1 Pad
- ⑨ Bread 2 Pad
- ⑩ Dough Pad
- ⑪ Delay/Stand Pad
- ⑫ Clock Pad
- ⑬ Stop/Cancel Pad
- ⑭ Start Pad

- ⑮ Auto Program Cooking Pads
- ⑯ Adjust to Taste Pad
- ⑰ Auto Reheat Pads
- ⑱ Auto Weight Combination Pad
- ⑲ Auto Weight Defrost Pad
- ⑳ 1 kg/0.1 kg Pads

OPERATION AND DIGITAL PROGRAMMER CIRCUIT TEST PROCEDURE

1. Clock Setting

1. Plug the power supply cord into wall receptacle.	2. Tap Clock Pad.	3. Enter time of day (TOD) by tapping appropriate 10 1 10 1 pads.	4. Tap Clock Pad. TOD has now been registered into the digital programmer circuit and will count up by minutes.
			

2. Time Cooking/Two Stage

1. Place a water load in the oven.	2. Tap Power pad once for High power. (1st stage)	3. Set for 5 seconds by tapping appropriate 10 1 10 1 pads.	4. Tap Power pad 3 times for Medium power. (2nd stage)
	 	  	 
5. Set for 10 seconds by tapping appropriate 10 1 10 1 pads.	6. Tap Start pad.	7. When first stage cooking time has elapsed, oven automatically switches to 2nd stage cooking.	8. When 2nd stage cooking time has elapsed, oven beeps 5 times and shuts off.
  	 	 	• TOD reappears in the display window.

3. Convection Cooking with Preheat

1. Tap Temp pad twice.	2. Tap Start pad.	3. When preheating is completed, oven beeps 3 times. "P" begins to blink.	4. After completion of preheating, be sure to open the door.
  	 	 	  
5. Close the door and set bake cooking time for 2 minutes.	6. Tap Start pad.	NOTE: NN-3559 accessory display is not appeared.	
  	 		

4. Convection—2 Level Cooking

1. Tap 2 Level Bake pad.	2. Tap Temp pad 7 times.	3. Tap Start pad.	4. When preheating is completed, oven beeps three times. "P" begins to blink.
			
5. After completion of preheating be sure to open the door.	6. Close the door and set time for 10 minutes.	7. Tap Start pad.	
			

5. Grill Cooking

1. Tap Grill pad once.	2. Set Cooking time for 30 minutes.	3. Tap Start pad.
		

6. Combination Cooking

1. Tap Combi pad twice.	2. Set cooking time for 1 hour.	3. Tap Start pad.
		

7. Auto Defrost (NN-3809/NN-3859/NN-3959)

1. Place the water load of 500g including container with plastic rack at center of tray and tap Defrost pad.	2. Tap Start pad.	3. After reading weight of food, total defrosting time is appeared.
 		 17 30

NOTE: If 16 00 to 20 20 appears, WEIGHT SENSOR FUNCTION is normal.
Because, there is reading tolerance of weight sensor.

8. Auto Program (Vegetable) (NN-3809/NN-3859/NN-3959)

1. Pour 150 ± 15cc (4.5 ± 1/2 ozs) of room temperature water in a beaker, and place it in the center of the oven.	2. Tap Vegetable pad.	3. Tap Start pad.
	 	
4. The humidity sensor detects steam about 2 to 4 minutes after the Start pad is tapped. Auto Reheat Cooking (T1) automatically switches to time cooking (T2). The remainder of cooking time appears in display window with beep sounds.	5. When the balance of cooking time has elapsed, oven stops and beeps five times.	
 1 12	 2 24	• TOD reappears in the display window.

NOTE: Cooking time will vary depending on the water temperature, the shape of beaker or the power source voltage.

NOTE: Please refer to description of operating sequence.

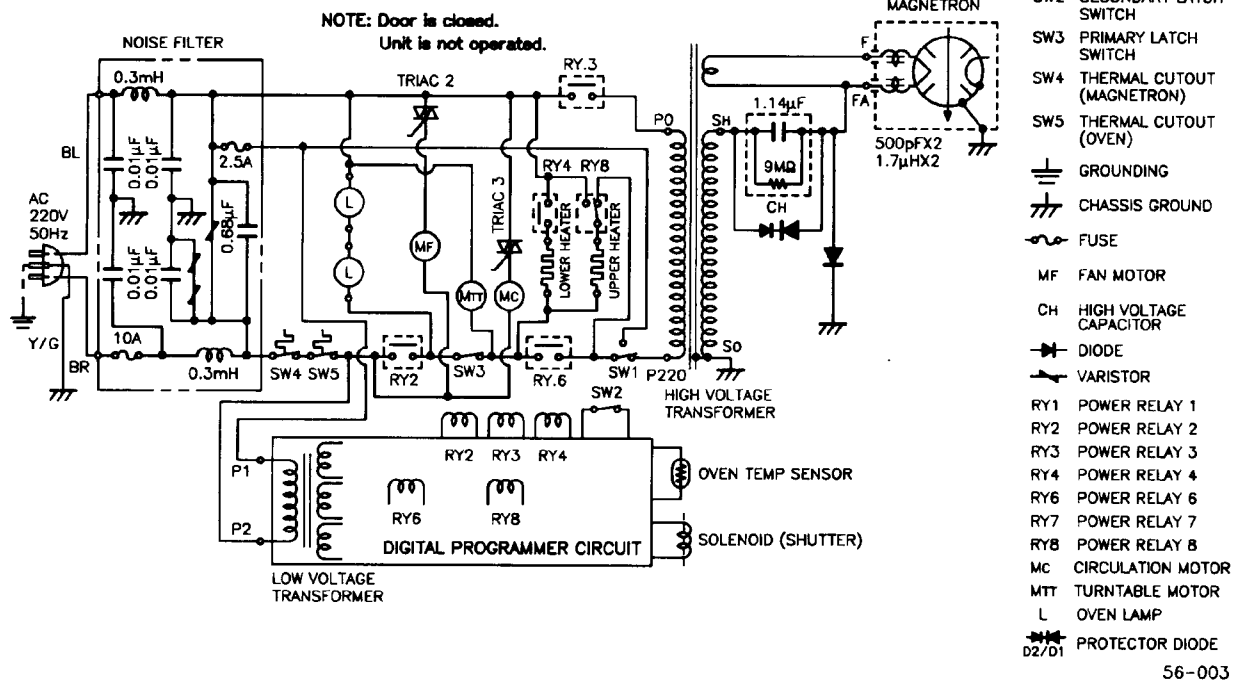
NOTE: If 1 12 to 2 24 appears, AUTO SENSOR FUNCTION is normal.

9. Bread Bakery (NN-3959)

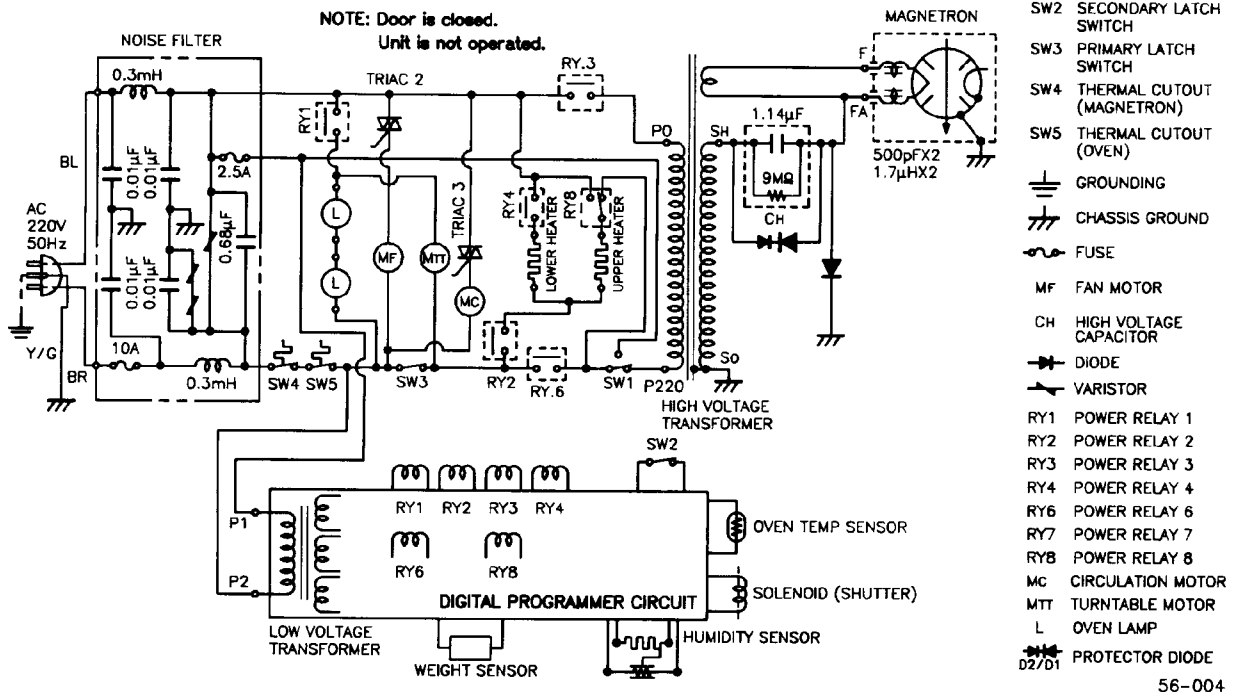
1. Place the bread pan at center of oven and tap Bread 1 pad.	2. Tap Start pad.	3. After 10 minutes, remaining time is appeared in the display window.
 		

SCHEMATIC DIAGRAM

NN-3559

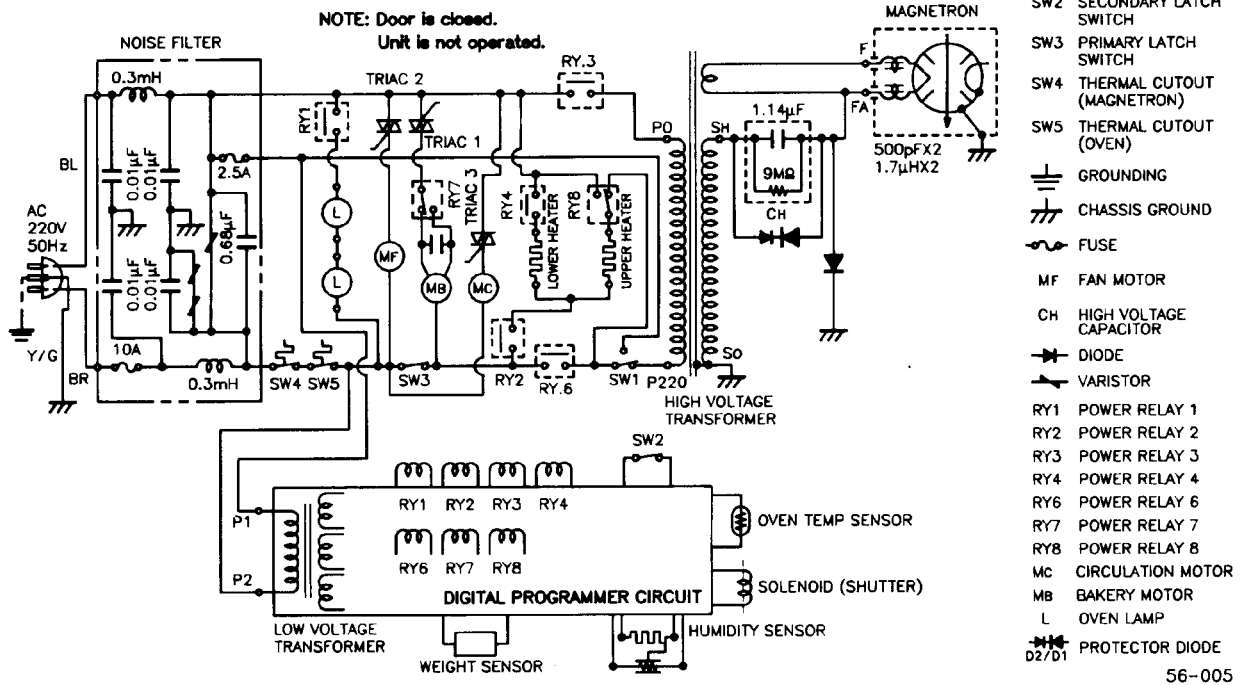


NN-3809/3859



SCHEMATIC DIAGRAM

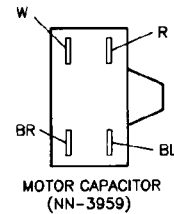
NN-3959



WIRING DIAGRAM

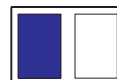
		NN-3559	NN-3809 NN-3859 NN-3959
PRIMARY LATCH SWITCH	①	Y/Y	Y
	②	W/W	W/BR
SECONDARY LATCH SWITCH	③	P	P
	④	P	P
SHORT SWITCH	⑤	B	B
	⑥	BR	BR
	⑦	OR/P	OR/P
POWER RELAY 2 (RY 2)	⑧	BR/BR/W	Y/Y
	⑨	W	B/W

		NN-3559	NN-3809 NN-3859 NN-3959
POWER RELAY 3 (RY 3)	⑩	B/BL	B/BL
	⑪	Y	Y
POWER RELAY 4 (RY 4)	⑫	B/BL	BL/BL/W
	⑬	W	BR
POWER RELAY 6 (RY 6)	⑭	B/Y	—
	⑮	BR/OR	BR/BR
POWER RELAY 8 (RY 8)	⑯	B/B/BL	B/W
	⑰	OR	BR
	⑱	BL	BL

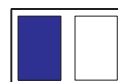


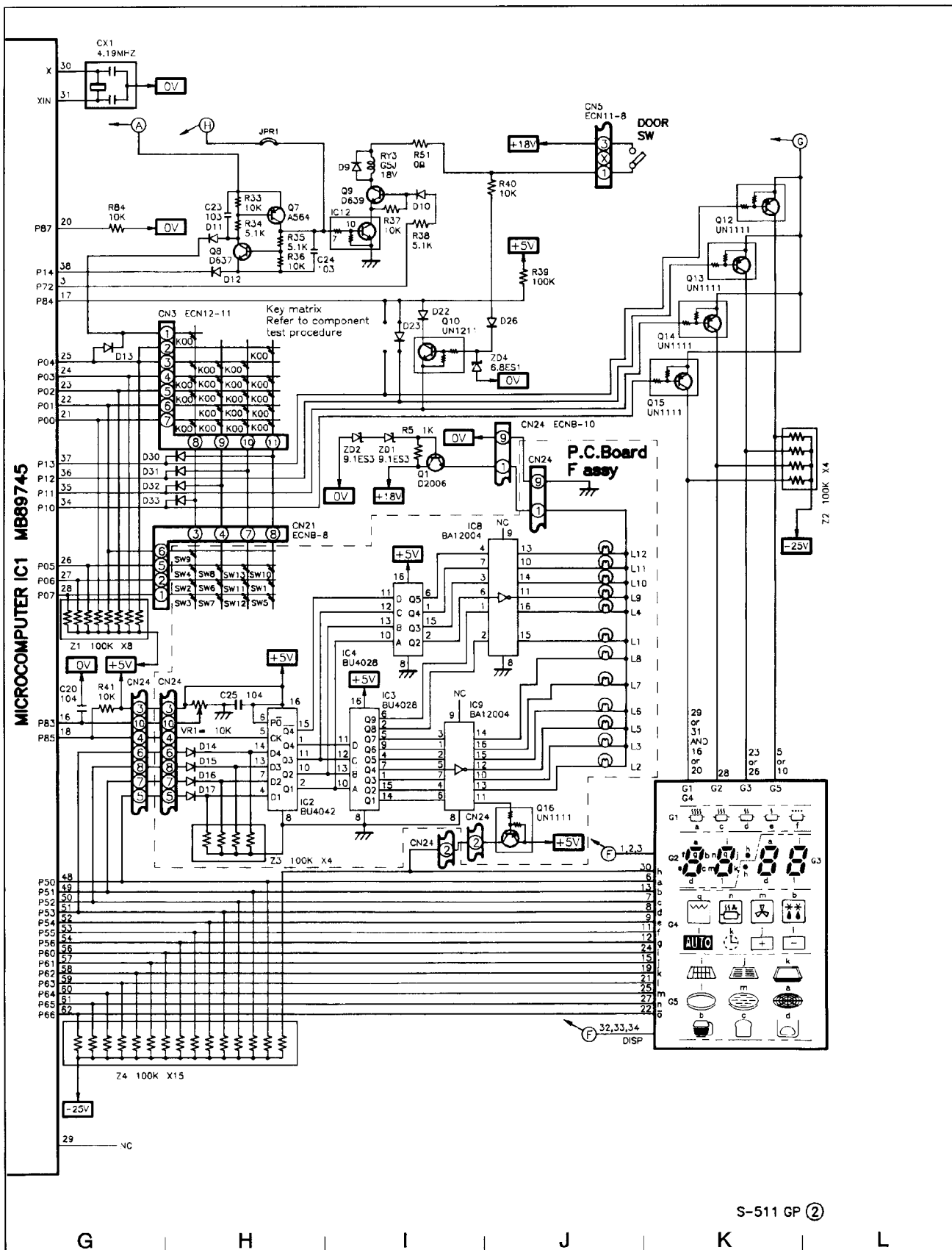
SYMBOL	COLOUR
OR	ORANGE
BL	BLUE
BR	BROWN
W	WHITE
Y	YELLOW
R	RED
GR	GRAY
B	BLACK
P	PINK

SCHEMATIC DIAGRAM

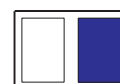


SCHEMATIC DIAGRAM

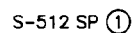




S-511 GP ②

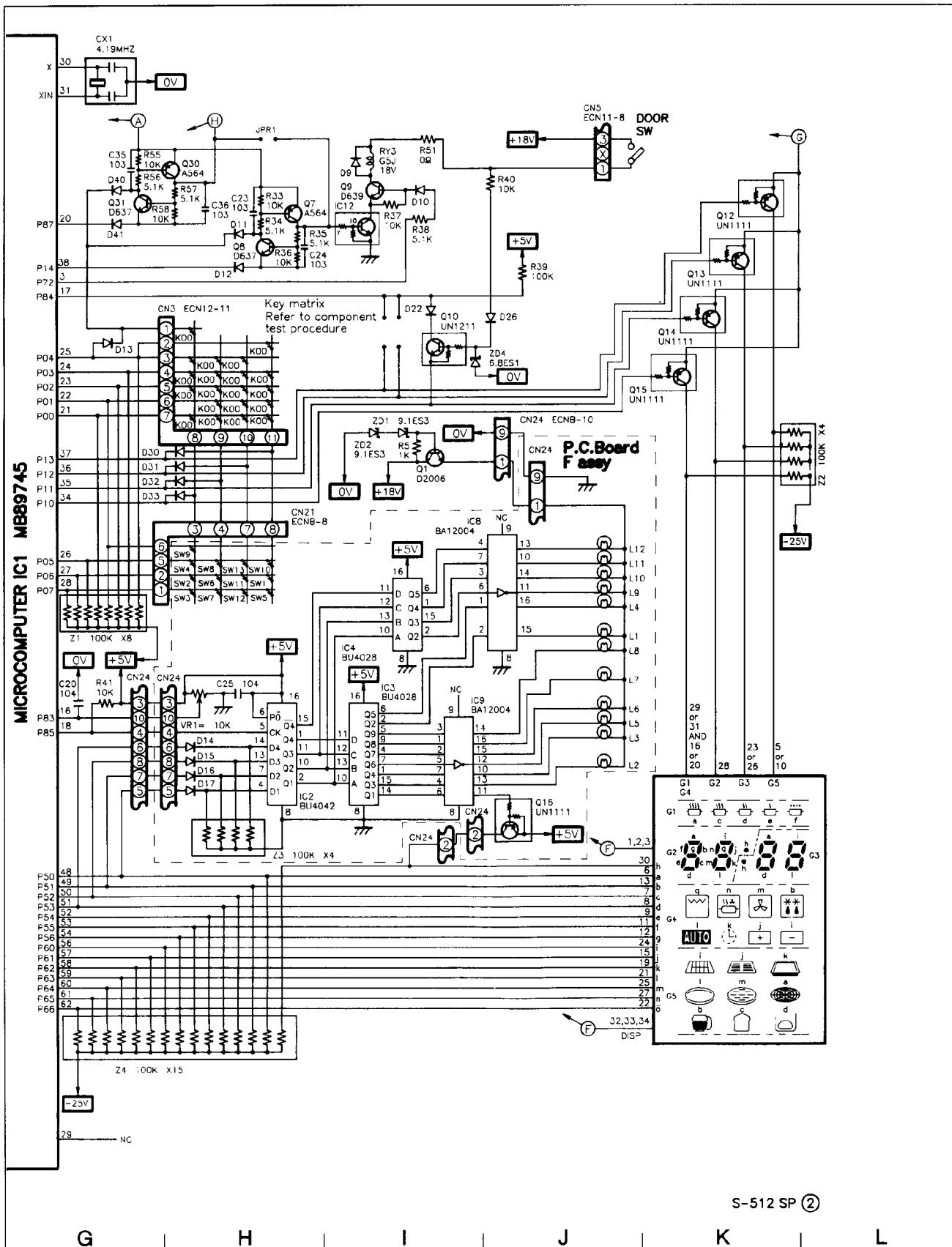


SCHEMATIC DIAGRAM



MICROCOMPUTER IC1 MB89745

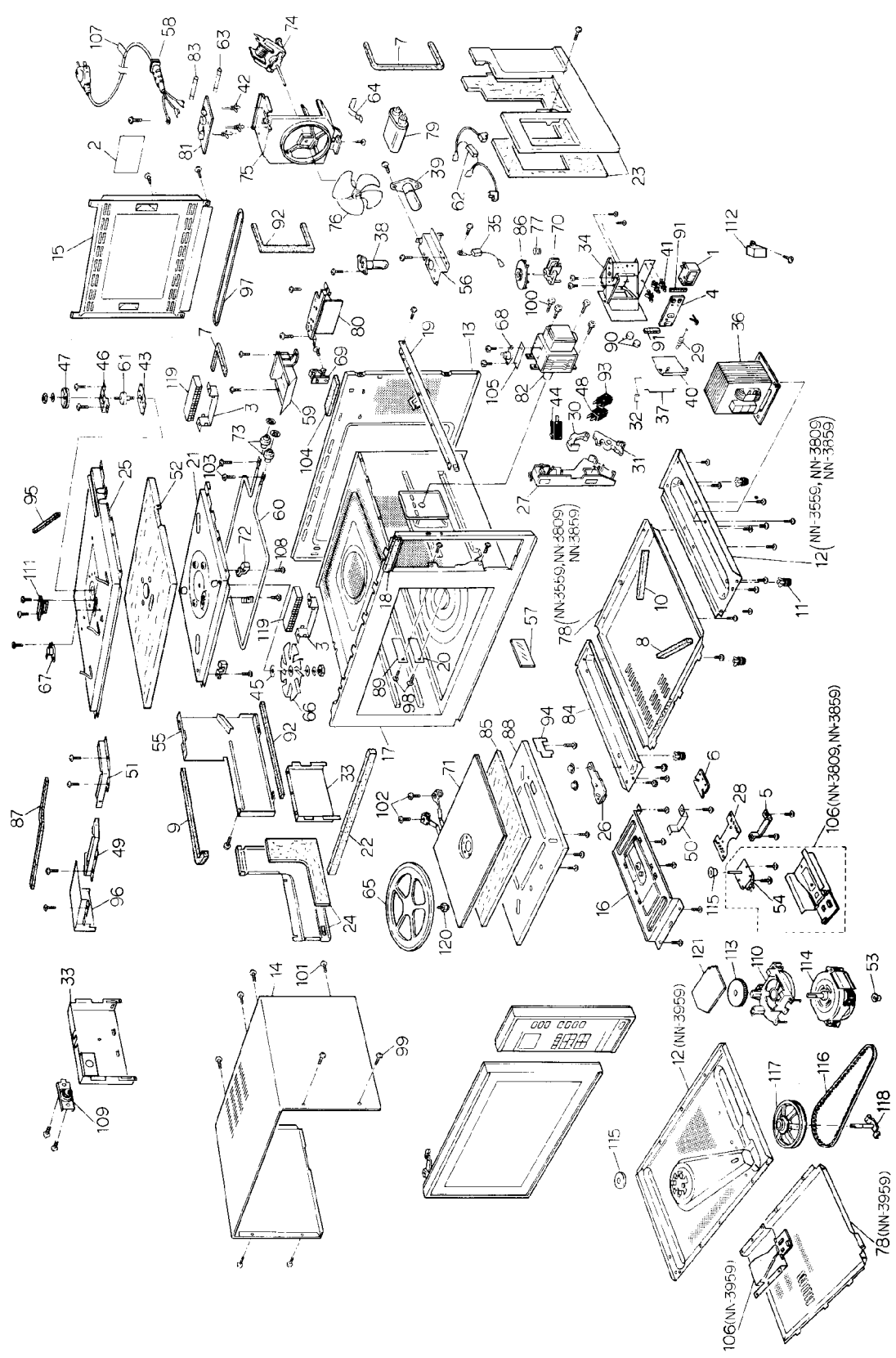




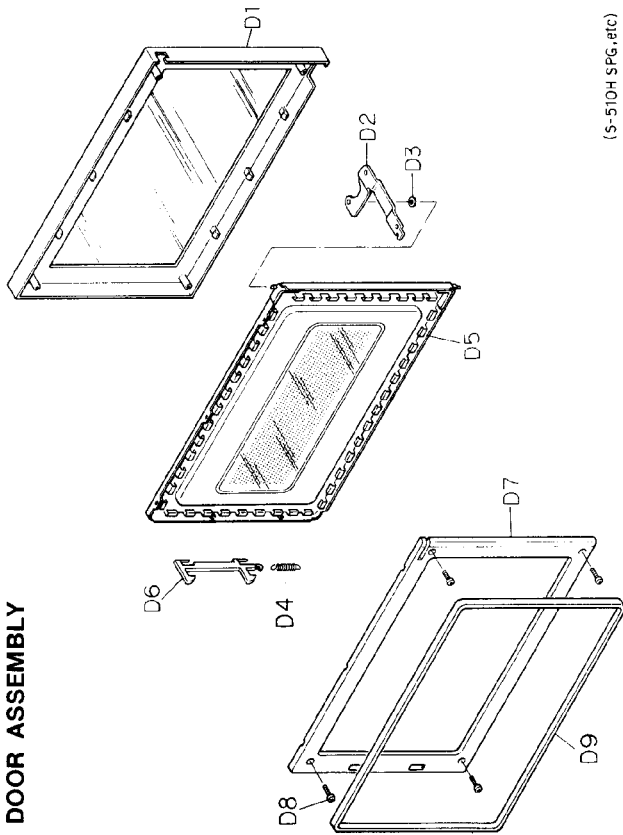
EXPLODED VIEW AND PARTS LIST

(S-510H SPG, etc.)

EXPLODED VIEW

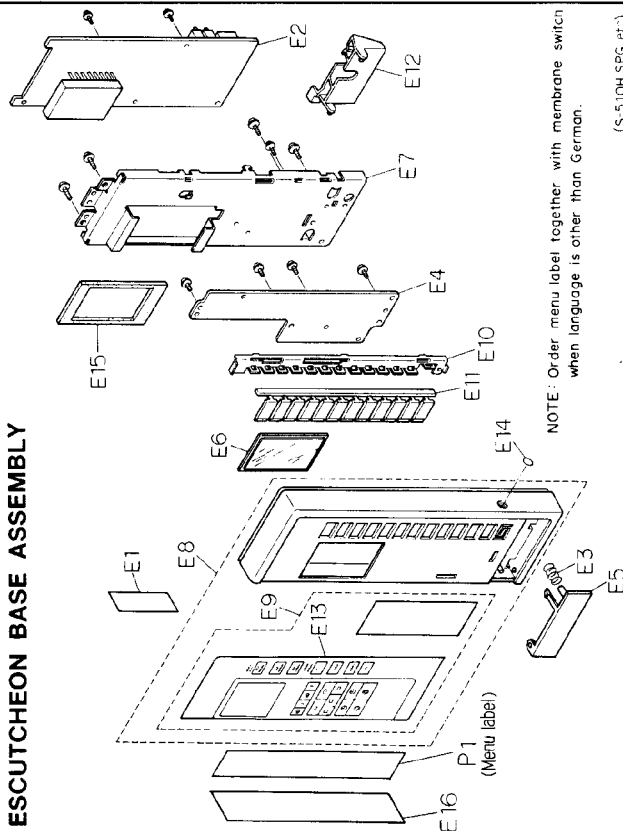


DOOR ASSEMBLY



(S-510H SPG, etc.)

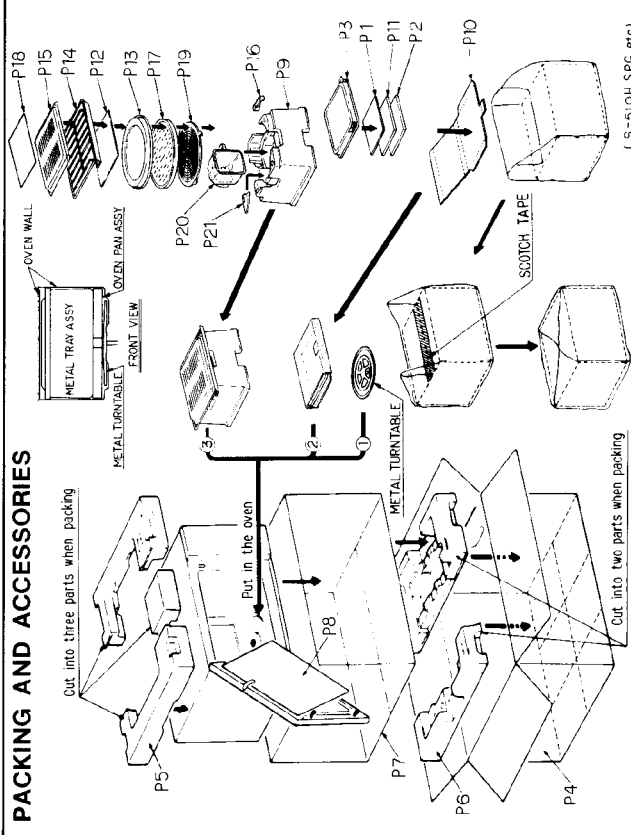
ESCUTCHEON BASE ASSEMBLY



NOTE: Order menu label together with membrane switch when language is other than German.

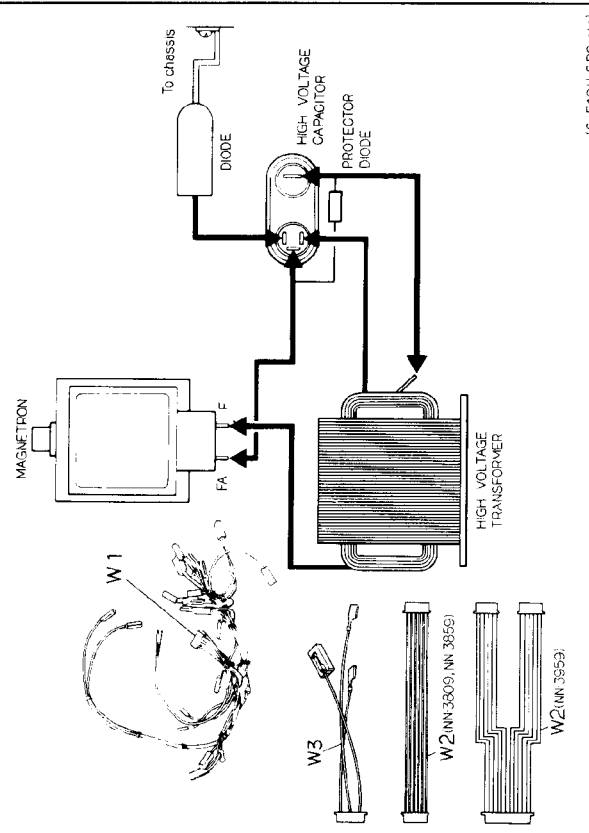
(S-510H SPG, etc.)

PACKING AND ACCESSORIES



(S-510H SPG, etc.)

WIRING MATERIAL



(S-510H SPG, etc.)

PARTS LIST

NOTE 1: When ordering replacement part(s), please use part number(s) shown in this parts list. Do not use description of the part.

2: Important safety notice:

Components identified by $\triangle$ mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

3: Alphabet marks in Remarks columns (i.e. SPG, etc) indicate parts applicable to only specified country models as follows.

SPG: For Scandinavian Countries, WPG: For Switzerland

Items marked * are supplied by MELUK.

Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
1	A60174210AP	Solenoid	1		51	A40245110BP	Exhaust guide A	1	
* 2	AEE00062Q0EP	Warning label	1		52	A22435110BP	Adiabatic material B	1	
3	A42575120AP	Filter holder B	2	NN-3809, NN-3859, NN-3869	53	A4131-1520	Pully A	1	NN-3859
4	A690B5120BP	Triac assy	1		54	$\triangle$ A63265110BP	Turntable motorassy	1	NN-3559, NN-3809, NN-3859 (AC, 4W, Single)
5-1	A66305020AP	Motor stopper	1	NN-3559	55	A400K5110BP	Exhaust guide	1	
5-2	A6630-2050	Motor stopper	1	NN-3809, NN-3859, NN-3869	56	A66035110BP	Oven lamp bracket	1	
6	A60325020AP	Terminal plate A	1		57	A64375110BP	Glass plate	1	
7	ANE000Z000AA	Cushion rubber C	2		58-1	$\triangle$ A900C5110SP	AC cord W/plug	1	NN-3559, NN-3809, NN-3859 SPG, NN-3859 SPG (220V)
8	ANE0925000AL	Cushion rubber C	1	NN-3559, NN-3809, NN-3859	58-2	$\triangle$ A900C5110WP	AC cord W/plug	1	NN-3809, NN-3859 WPG, NN-3859 WPG
9	ANE0925000BU	Cushion rubber C	1		59	A402A5110BP	Air guide E	1	
10	ANE0923000BK	Cushion rubber	1	NN-3559, NN-3809, NN-3859	60	$\triangle$ A630H5110GP	Surface heater	1	
11	ANE1008-5S0	Rubber foot	4		61	A41645110SS	Shaft assy	1	
12-1	A10015020AP	Base	1	NN-3559, NN-3809, NN-3859	62	$\triangle$ A606V5110BP	Protector diode	1	
12-2	A100A5120BP	Base	1	NN-3859	63	$\triangle$ XBA2C25TROBS	Fuse	1	(2.5A)
13	A10045110BP	Back panel	1		64	A61885110BP	Capacitor holder	1	
14-1	A10095110HBP	Cabinet body assy	1	NN-3559, NN-3859, NN-3869	65-1	A201F5020AP	Metal turntable	1	NN-3559, NN-3809, NN-3859
14-2	A10095110BP	Cabinet body assy	1	NN-3809	65-2	A201F5120BP	Metal turntable	1	NN-3859
15	A10585110BP	Back panel cover A	1		66	A22395020AQ	Circulation fan	1	
16	A63235020AP	Motor bracket	1	NN-3559, NN-3809, NN-3859	67,68	$\triangle$ A61454760JP	Thermal cutout	2	
17-1	A200A5110BP	Oven	1	NN-3559, NN-3809, NN-3859	* 69	AEE1140X70AP	Stopper A	1	
17-2	A200A5120BP	Oven	1	NN-3859	70	$\triangle$ A41795110GP	Circulation motor	1	(AC, 35W, Single)
18	ANE0921000CG	Cushion rubber C	1		71-1	$\triangle$ A630G5110GP	Sheathed heater	1	NN-3559, NN-3809, NN-3859
19	A20365020AP	Reinforce bracket B	1		71-2	$\triangle$ A630G5120GP	Sheathed heater	1	NN-3859
20	A20555110BP	Cover A	1		72	A64175110BP	Heater support A	3	
21	A21445110BP	Upper panel B	1		73	ANE6501K90AP	Holder C	2	
22	A11275110BP	Cushion	1		74	$\triangle$ A400A4760JP	Fan motor	1	(AC, 26W, Single)
23	A203N5110BP	Right heater panel	1		75	A41445020AP	Orifice	1	
24	A203S5110BP	Left heater panel	1		76	ANE40086W0AP	Fan	1	
25	A22785110BP	Upper heater panel	1		77	ANE4057-F50	Spring	1	
26	A301L4210AP	Lower hinge	1		78-1	A10265110BP	Motor cover	1	NN-3559, NN-3809, NN-3859
27	A30204310AG	Door hook A	1		78-2	A10265120BP	Motor cover	1	NN-3859
28-1	A66395020AP	Motor bracket B	1	NN-3559	79	$\triangle$ A60904080GP	H.V.Capacitor	1	(1.14uF, AC2100V)
28-2	A66395110BP	Motor bracket B	1	NN-3809, NN-3859	80-1	$\triangle$ A692M5100GP	L.V.Transformer assy	1	NN-3559
29	A41754210AP	Spring	1		80-2	$\triangle$ A692M5120GP	L.V.Transformer assy	1	NN-3809, NN-3859, NN-3859
30	A31384650AP	Hook spacer C	1		81	A692Y5100SP	Noise filter assy	1	
31	A31374650AP	Hook spacer B	1		82	$\triangle$ 2M210-M1C	Magnetron	1	
32	A41765110BP	Spring B	1		83	$\triangle$ A62304210BP	Fuse	1	
33-1	A41075100GP	Exhaust guide B	1	NN-3559	84	A11295020AP	Base B	1	NN-3559, NN-3809, NN-3859
33-2	A401Y5120AP	Exhaust guide	1	NN-3809, NN-3859, NN-3869	85	A22425020AP	Adiabatic material A	1	
34	A400E5110BP	Air guide A	1		86	A40085110BP	Fan	1	
35	A62024000AP	Diode	1	(Si, 0.35mA)	87	ANE0962000AR	Cushion rubber D	1	
36	$\triangle$ A620A5100GP	H.V.Transformer	1	(1.4KVA)	88	A22775020AP	Lower heater panel	1	
37	A41744210AP	Shaft	1		89	A23545110BP	Cover B	1	
38-39	$\triangle$ A610T4660AP	Incandescent lamp	2	(125V, 20W)	90	A41834210AP	Cushion rubber A	2	
40	A41735110BP	Shutter	1		91	A41844210AP	Cushion rubber B	2	
41	ANE6532-F70	Spacer A	3		92	ANE000Z000AB	Cushion rubber C	2	
42	A65325110BP	Spacer A	3		93	$\triangle$ A61424650AP	Micro switch	1	Secondary latch switch (L-3C2-MR)
43	A41585020AQ	Fan bracket B	1		94	A40305110BP	Air guide D	1	
44	$\triangle$ ANE61422Q0BP	Micro switch	1	Primary latch switch (AV53406)	95	A41025110BP	Air guide cushion A	1	
45	A41635020AQ	Fan spacer C	1		96	A41195110BP	Exhaust guide D	1	NN-3859 SPG
46	A41575020AQ	Fan bracket A	1		97	A41555110BP	Square belt, Si	1	(1.7mm)
47	A41325020AQ	Pulley B	1		98	XST4+5VS	Screw 4x5	2	
48	$\triangle$ ANE61782Q0GP	Micro switch	1	Short switch (AV51606)	99	XTC4+10BC	Tapping screw 4x10	4	
49	A41145110BP	Exhaust guide C	1						
50	A61435120BP	Bracket	1	NN-3859					

Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
100	XTWANE4+10RU	Tapping screw 4×10	4	
101	XYCANE4+E12R	Tapping screw 4×12	4	
102	XYN5+C10FN	Screw 5×10	2	
103	XYT4+C8VS	Screw 4×8	4	
104	ANE0924000DG	Cushion rubber C	1	
105	A62J84310AG	Spacer	1	
106-1	A203K5110BP	Weight sensor assy	1	NN-3809, NN-3859
106-2	A203K5120BP	Weight sensor assy	1	NN-3959
107	ANE0239X70SP	Cord label	1	
108	XTWANE4+12BN	Tapping screw 4×12	2	
109	A601A5110BP	Humidity sensor	1	NN-3809, NN-3859, NN-3959
110	A65855120BP	P.C.B.Holder	1	NN-3959
111-1	A605Y5100GP	Oven temp sensor	1	NN-3559 With small P.C.B
111-2	A605Y5110BP	Oven temp sensor	1	NN-3809, NN-3859, NN-3959 With small P.C.B
112	A66985120GP	Capacitor	1	NN-3959
113	A6713-1520	Detection disk	1	NN-3959
114	A67335120GP	Bakery motor	1	NN-3959
115-1	ANE4071-5G0	Washer	1	NN-3559
115-2	A4071-1110	Washer	1	NN-3809, NN-3859
115-3	A4071-1520	Washer	1	NN-3959
116	A40605120BP	Flat belt, Si	1	NN-3959
117	A4132-1520S	Pulley assy	1	NN-3959
118	A204G5120BP	Pulley shaft	1	NN-3959
119	A42415120AP	Filter	2	NN-3809, NN-3859, NN-3959
120	A42525120BP	Connector B	1	NN-3959
121	A691S5120BP	Motor control assy	1	NN-3959

DOOR ASSEMBLY

D1-1	A302A5110HBP	Door A assy	1	NN-3559, NN-3859, NN-3959
D1-2	A302A5110GP	Door A assy	1	NN-3809
D2	A300B4210AP	Upper hinge	1	
D3	ANE3081B60AP	Door hinge spacer	1	
D4	A30214000AP	Door key spring	1	
D5	A302K5110BP	Door E assy	1	
D6	A301B4650AP	Door key A	1	
D7-1	A30855040HAP	Door C	1	NN-3559
D7-2	A30855110BP	Door C	1	NN-3809
D7-3	A30855110HBP	Door C	1	NN-3859, NN-3959
D8-1	XTBANE4+12FC	Tapping screw 4×12	4	NN-3559, NN-3859, NN-3959
D8-2	XTBANE4+12FK	Tapping screw 4×12	4	NN-3809
D9	A33345110BP	Door C rubber	1	NN-3809, NN-3859, NN-3959

ESCUTCHEON BASE ASSEMBLY

E1-1	A01575100HSP	Name plate	1	NN-3559
E1-2	A01575110WP	Name plate	1	NN-3809
E1-3	A01575110HSP	Name plate	1	NN-3859 SPG
E1-4	A01575110HWP	Name plate	1	NN-3859 WPG
E1-5	A01575120HSP	Name plate	1	NN-3959 SPG
E1-6	A01575120HWP	Name plate	1	NN-3959 WPG
E2-1	△ A603L5100SP	D.P.Circuit assy	1	NN-3559 (W/Component)
E2-2	△ A603L5110SP	D.P.Circuit assy	1	NN-3809 NN-3859 (W/Component)
E2-3	△ A603L5120SP	D.P.Circuit assy	1	NN-3959 (W/Component)
E3	ANE80378A0AG	Spring	1	
E4-1	A605Q5100GP	P.C.Board F assy	1	NN-3559 (W/Component)
E4-2	A605Q5110BP	P.C.Board F assy	1	NN-3809 NN-3859, NN-3959 (W/Component)
E5-1	A80725110HBP	Door opening button	1	NN-3559, NN-3859, NN-3959
E5-2	A80725110GP	Door opening button	1	NN-3809

Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
E6	A81265110BP	Smoke panel	1	
E7	A81275110BP	Bracket	1	
E8-1	A800L5100HSP	Escutcheon base assy	1	NN-3559 (NOTE 5) With Membrane switch assy
E8-2	A800L5110WP	Escutcheon base assy	1	NN-3809 (NOTE 5) With Membrane switch assy
E8-3	A800L5110HSP	Escutcheon base assy	1	NN-3859 SPG (NOTE 5) With Membrane switch assy
E8-4	A800L5110HWP	Escutcheon base assy	1	NN-3859 WPG With Membrane switch assy
E8-5	A800L5120HSP	Escutcheon base assy	1	NN-3959 SPG (NOTE 5) With Membrane switch assy
E8-6	A800L5120HWP	Escutcheon base assy	1	NN-3959 WPG With Membrane switch assy
E9-1	△ A630Y5100HSP	Membrane switch assy	1	NN-3559 (With Escutcheon sheet)
E9-2	△ A630Y5110WP	Membrane switch assy	1	NN-3809 (With Escutcheon sheet)
E9-3	△ A630Y5110HSP	Membrane switch assy	1	NN-3859 SPG (With Escutcheon sheet)
E9-4	△ A630Y5110HWP	Membrane switch assy	1	NN-3859 WPG (With Escutcheon sheet)
E9-5	△ A630Y5120HSP	Membrane switch assy	1	NN-3959 SPG (With Escutcheon sheet)
E9-6	△ A630Y5120HWP	Membrane switch assy	1	NN-3959 WPG (With Escutcheon sheet)
E10	A81285110BP	Bracket B	1	
E11	A82965110BP	Spacer	1	
E12	A82565110BP	Door opening lever	1	
E13-1	A83375100HSP	Escutcheon sheet	1	NN-3559
E13-2	A83375110WP	Escutcheon sheet	1	NN-3809
E13-3	A83375110HSP	Escutcheon sheet	1	NN-3859 SPG
E13-4	A83375110HWP	Escutcheon sheet	1	NN-3859 WPG
E13-5	A83375120HSP	Escutcheon sheet	1	NN-3959 SPG
E13-6	A83375120HWP	Escutcheon sheet	1	NN-3959 WPG
E14-1	ANE8029-Y00H	Spacer	1	NN-3559 NN-3859 NN-3959
E14-2	ANE8029-5LOT	Spacer	1	NN-3809
E15	A82845110BP	Cushion rubber	1	
E16	A62865110BP	Shield plate	1	

PACKING AND ACCESSORIES

P1-1	A03345100HPZ	Menu label	1	NN-3559 (Portuguese)
P1-2	A03345100HSZ	Menu label	1	NN-3559 (Spanish)
P1-3	A03345100HZ	Menu label	1	NN-3559 (Dutch)
P1-4	A03345100HFZ	Menu label	1	NN-3559 (French)
P1-5	A03345100HEZ	Menu label	1	NN-3559 (Italian)
P1-6	A03345100HDZ	Menu label	1	NN-3559 (Danish)
P1-7	A03345100HNZ	Menu label	1	NN-3559 (Norwegian)
P1-8	A03345100HKZ	Menu label	1	NN-3559 (Finnish)
P1-9	A03345100HWZ	Menu label	1	NN-3559 (Swedish)
P1-10	A03345110PZ	Menu label	1	NN-3809 (Portuguese)
P1-11	A03345110SZ	Menu label	1	NN-3809 (Spanish)
P1-12	A03345110HZ	Menu label	1	NN-3809 (Dutch)
P1-13	A03345110FZ	Menu label	1	NN-3809 (French)
P1-14	A03345110EZ	Menu label	1	NN-3809 (Italian)
P1-15	A03345110DZ	Menu label	1	NN-3809 (Danish)
P1-16	A03345110NZ	Menu label	1	NN-3809 (Norwegian)
P1-17	A03345110KZ	Menu label	1	NN-3809 (Finnish)
P1-18	A03345110WZ	Menu label	1	NN-3809 (Swedish)
P1-19	A03345110HPZ	Menu label	1	NN-3859, NN-3959 (Portuguese)
P1-20	A03345110HSZ	Menu label	1	NN-3859, NN-3959 (Spanish)
P1-21	A03345110HZ	Menu label	1	NN-3859, NN-3959 (Dutch)
P1-22	A03345110FZ	Menu label	1	NN-3859, NN-3959 (French)
P1-23	A03345110EZ	Menu label	1	NN-3859, NN-3959 (Italian)
P1-24	A03345110DZ	Menu label	1	NN-3859, NN-3959 (Danish)
P1-25	A03345110NZ	Menu label	1	NN-3859, NN-3959 (Norwegian)
P1-26	A03345110KZ	Menu label	1	NN-3859, NN-3959 (Finnish)
P1-27	A03345110HWZ	Menu label	1	NN-3859, NN-3959 (Swedish)

Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
P2-1	A00035110SP	Instruction book	1	NN-3559/NN-3859 SPG
P2-2	A00035110EP	Instruction book	1	NN-3809/NN-3859 WPG
P2-3	A00035120SP	Instruction book	1	NN-3959 SPG
P2-4	A00035120WP	Instruction book	1	NN-3959 WPG
P3	A060W5020AP	Oven pan	1	
P4-1	A01025100HEP	Packing case, paper	1	NN-3559
P4-2	A01025110EP	Packing case, paper	1	NN-3809
P4-3	A01025110HEP	Packing case, paper	1	NN-3859
P4-4	A01025120HEP	Packing case, paper	1	NN-3959
P5	A01045110BP	Upper filler	1	
P6	A01055110BP	Lower filler	1	
P7	A01065200AP	Vinyl cover	1	
※ P8	E01074060AP	Door sheet	1	
P9	A01135110BP	Tray styrol	1	
P10	A03385110BP	Packing	1	
※ P11	AEE0169Q50GN	Servicenter list	1	
P12	ANE0207-860	Styrol sheet	1	
P13	A06015020AP	Metal tray	1	
P14	A06025110BP	Top rack shelf	1	
P15	A06485110BP	Square splash guard	1	
P16	A07335120BP	Bakery spoons	1	NN-3959
P17	A06485020AP	Round splash guard	1	
P18	A02075110BP	Styrol sheet	1	
P19	A07064700AP	Plastic defrost rack	1	NN-3809, NN-3859, NN-3959
P20	A062D5120BP	Bread case	1	NN-3959
P21	A062E5120GP	Fan	1	NN-3959
WIRING MATERIAL				
W1-1	A030A5100SP	Lead wire harness	1	NN-3559
W1-2	A030A5110SP	Lead wire harness	1	NN-3809, NN-3859, NN-3959
W2-1	A03635110BP	Lead wire	1	NN-3809, NN-3859
W2-2	A03635120BP	Lead wire	1	NN-3959
W3	A03615120BP	Lead wire	1	NN-3959
Ref.No.4 Triac assy				
C500, 501	AECF055F104Z	Ceramic capacitor	2	(Multi layer) 0.1μF, -20%+80%, 50V
C502, 503	ECQE2A104KF	Polyester capacitor	2	0.1μF, ±20%, 250V
CN500	AEEMMB01505W	5 pin connector	1	
CN501	AEEMMB00703W	3 pin connector	1	
D500, 501	AESM3J247LB1	Triac	2	
IC500, 501	AEICTLP665JF	Photo triac	2	
R500, 501, 502, 503	ERDS1TJ561T	Carbon film resistor	4	560Ω, ±3%, 1/2W
R504, 505, 506, 507	ERDS2TJ181T	Carbon film resistor	4	180Ω, ±3%, 1/4W
R508, 509	ERDS2TJ331T	Carbon film resistor	2	330Ω, ±3%, 1/4W
R510, 511	ERDS2TJ121T	Carbon film resistor	2	120Ω, ±3%, 1/4W
Ref.No.80 L.V.Transformer assy				
C8	ECEA1CU222E	Electrolytic capacitor, AI	1	NN-3809, NN-3859, NN-3959 2200μF, ±20%, 16V

Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
CN51-1	A03575100GP	Lead wire	1	NN-3559
CN51-2	A03575110BP	Lead wire	1	NN-3809, NN-3859, NN-3959
CN50	AEEMMA00503R	3 pin connector	1	NN-3809, NN-3859, NN-3959
CN100	AEEMMA00503R	3 pin connector	1	NN-3509, NN-3559
F2-1, F3-1	A604K5100GP	Protector	2	NN-3559
F2-2, F3-2	ANE604K8U0BP	Protector	2	NN-3809, NN-3859, NN-3959
F1	A604K5110BP	Protector	1	NN-3809, NN-3859, NN-3959
Q4-1	A6244-1500	Heat sink	1	NN-3809, NN-3859, NN-3959
Q4-2	2SB941	Transistor	1	NN-3809, NN-3859, NN-3959
D505, 52, 53	AEDNERB1202L	Diode, Si	4	NN-3809, NN-3859, NN-3959
T1-1	△ A62495100GP	L.V.Transformer	1	NN-3559 (ETP43K124E)(11VA)
T1-2	△ A62495110GP	L.V.Transformer	1	NN-3809, NN-3859, NN-3959 (ETP57P119E)
	A65645110BP	Bracket	1	
Ref.No.81 Noise filter assy				
C1	ECQU2A104MN	Polyester capacitor	1	0.1μF, ±20%, 250V
C4, 5	△ ECKDNS472MEX	Ceramic capacitor	2	(Single layer) 0.0047μF, ±20%, 250V
CN1	AEEMMA00703W	3 pin connector	1	
L1	ANE621AZ70BP	Filter coil	1	
ZNR1	ERZC10DK621F	Varistor	1	
ZNR2, 3	ERZC10DK112F	Varistor	2	
	ANE6231H60RN	Fuse holder	2	
	ANE6231Q50GN	Fuse holder	2	
Ref.No.121 Motor control assy (NN-3959)				
C800	ECQE2A104KF	Polyester capacitor	1	0.1μF, ±20%, 250V
C901	AECF055F104Z	Ceramic capacitor	1	(Multi layer) 0.1μF, -20%+80%, 50V
CN900	AEEMMB03F06W	6 pin connector	1	
CN901	AEEMW-P86571	7 pin connector	1	
D900	AESM3J247LB2	Triac	1	
IC900	AEICTLP665JF	Photo triac	1	
IC901	ON1114	Photointerrupter	1	
R900, 901, 905, 907	ERDS1TJ561T	Carbon film resistor	4	560Ω, ±5%, 1/2W
R902, 903	ERDS2TJ151T	Carbon film resistor	2	150Ω, ±5%, 1/4W
R904	ERDS2TJ331T	Carbon film resistor	1	330Ω, ±5%, 1/4W
R905	ERDS2TJ680T	Carbon film resistor	1	68Ω, ±5%, 1/4W
RY7	△ AEBVG-18P-0	Power relay	1	(18V)

NOTE 5: Please order name plate together.

PARTS LIST (NN-3559)

Ref. No.	Part No.	Description	Pcs/Set	Remarks	Ref. No.	Part No.	Description	Pcs/Set	Remarks
DISP	A64565100GP	Fluorescent Tube	1		C3	ECEA1VU471B	Aluminium capacitor	1	470 μ F, $\pm$ 20%, 35V
SPACER	ANE6238-3ZC	Spacer Cushion	1	For DISP	C4	ECEA1CU220B	Aluminium capacitor	1	22 μ F, $\pm$ 20%, 16V
CN3	AEEMMA00F04W	4 pin connector	1		C5,6,13,16, 17,21,22,23, 24,26	ECBT1E103ZF5	Ceramic capacitor	10	(Single layer) 0.01 μ F, $\pm$ 20%+80%, 25V
CN4	AEEM11FDZBTM	11 pin connector	1		C7,11,12,20, 25,27	AECF055F104Z	Ceramic capacitor	6	(Multi layer) 0.1 μ F, $\pm$ 20%+60%, 50V
CN5	AEEMMA0FD08W	8 pin connector	1		C8	ECEA1HU2R2B	Aluminium capacitor	1	2.2 μ F, $\pm$ 20%, 50V
CN7	AEEMB05BEHA	5 pin connector	1		C14,18,19	ECKR1H103ZF	Ceramic capacitor	3	(Single layer) 0.01 μ F, $\pm$ 20%+80%, 50V
CN21,22	AEEM52011061	6 pin connector	2		R1,2	ERDS2TJ201T	Carbon Film Resistor	2	200 Ω , $\pm$ 5%, 1/4W
BZ	AEFB22EP2002	Buzzer	1	2.0KHz	R3,11,12,13 22,23,25,27, 34,35,36,37, 38,39,43,48	ERDS2TJ103T	Carbon Film Resistor	16	10K Ω , $\pm$ 5%, 1/4W
CX1	AEFFT4R19GW	Ceramic Resonator	1	4.19MHz	R4,5	ERDS2TJ302T	Carbon Film Resistor	2	3K Ω , $\pm$ 5%, 1/4W
RY2,3,4,6	AEG5J1EG18A	Power Relay	4	(18V)	R6	ERG2SJ470P	Metal Oxide Resistor	1	47 Ω , $\pm$ 5%, 2W
RY8	AEAWJXDC18G	Power Relay	1	(18V)	R7,29,31,49	ERDS2TJ512T	Carbon Film Resistor	4	5.1K Ω , $\pm$ 5%, 1/4W
IC1	AEIC85141197	L.S.I. (MOS Microprocessor IC)	1		R8,15,40	ERDS2TJ102T	Carbon Film Resistor	3	1.0K Ω , $\pm$ 5%, 1/4W
IC2	AN6752	I.C.	1		R14	ERDS2TJ914T	Carbon Film Resistor	1	910K Ω , $\pm$ 5%, 1/4W
IC3,4	AEICBA12004	I.C.	2		R24	ERDS2TJ201T	Carbon Film Resistor	1	2K Ω , $\pm$ 5%, 1/4W
Q1,5,7	2SD2006-R	Transistor, Si, 1.2W	3	(100MHz)	R28	ERDS2TJ273T	Carbon Film Resistor	1	27K Ω , $\pm$ 5%, 1/4W
Q3	UN4211	Transistor, Si, 300mW	1		R30	ERDS2TJ153T	Carbon Film Resistor	1	15K Ω , $\pm$ 5%, 1/4W
Q6	2SC1318-R	Transistor, Si, 400mW	1	(200MHz)	R32,47	ERDS2TJ100T	Carbon Film Resistor	2	10 Ω , 25%, 1/4W
Q8,9,10,11	UN4123	Transistor, Si, 300mW	4		R33,44,45 46	ERDS2TJ104T	Carbon Film Resistor	4	100K Ω , $\pm$ 5%, 1/4W
Q12	2SC1685-R	Transistor, Si, 250mW	1	(150MHz)	R41,42	ERDS2TJ390T	Carbon Film Resistor	2	39 Ω , $\pm$ 5%, 1/4W
D1,2,3	AEDNERA1502	Diode	3	Si, 2A	Z1	AEXB10104J	Carbon Film Resistor	1	100K Ω X 10, $\pm$ 5%, 1/8W
D4,5,6,7, 9,10,12	MA195	Diode	7	Si, 200mA	Z2,3	AEXB08104J	Carbon Film Resistor	2	100K Ω X 8, $\pm$ 5%, 1/6W
D8	MA196	Diode	1	Si, 200mA					
ZD1	AEDZ4R7ES3T1	Zener Diode	1						
ZD2	AEDZ5R6ES2T1	Zener Diode	1						
ZD3,4	AEDZ9R1ES3T1	Zener Diode	2						
ZD10	AEDZ15ES3T1	Zener Diode	1						
C1	ECEA1VU102E	Aluminium capacitor	1	100 μ F, $\pm$ 20%, 35V					
C2	ECEA1VU221B	Aluminium capacitor	1	220 μ F, $\pm$ 20%, 35V					

SERVICE FIXTURES AND TOOLS

EXTENSION CABLES

NOTE: To be used when repairing the DPC board assembly directly on the oven for easy access of the board.

Ref. No.	Part No.	Description	Pcs/Set	Remarks
	AT40M004	4 pin Extension Cable	1	Cable No. 16
	AT40K005	5 pin Extension Cable	1	Cable No. 41
	AT40M008	8 pin Extension Cable	1	Cable No. 38
	AT40E006	1 pinX6 Extension Cable	2	Cable No. 9

DPC COMMON CHECKER AND ITS CABLE

NOTE: To be used only when DPC common checker is available.

Ref. No.	Part No.	Description	Pcs/Set	Remarks
	ANE600ZK70GP	DPC. Common Checker	1	
	AT30A5100GP	DPC. Checker Cable	1	NOTE

Ref. No. E4 P.C.Board F assy

Ref. No.	Part No.	Description	Pcs/Set	Remarks
L2,3,4,6 7	A61655110BP	Pilot Lamp	5	
SW2,3,4, 6,7,8,9	EVQQTG05R	Push switch	7	
	A65905100GP	Flat Cable	2	CN21,22

PARTS LIST (NN-3809/3859/3959)

Ref. No.	Part No.	Description	Pcs/Set	Remarks
DISP	A64565120BP	Fluorescent Tube	1	
SPACER	ANE6238-3Z0	Spacer cushion	1	
CN1	AEEMB07BEHA	7 pin connector	1	
CN3	AEEM11FDZBTM	11 pin connector	1	
CN4	AEEMB05PSHF3	5 pin connector	1	
CN5	AEEMMA0FD08W	8 pin connector	1	
CN6	AEEMMC00503W	3 pin connector	1	
CN8	AEEMMA07F07W	7 pin connector	1	NN-3809, NN-3859
CN8	AEEMMAFF12W	12 pin connector	1	NN-3959
CN9	AEEMB09P-MQ	9 pin connector	1	
CN21	AEEM52011081	8 pin connector	1	
CN24	AEEM52011101	10 pin connector	1	
BZ	AEFB22EP2002	Buzzer	1	2.0 KHz
CK1	AEFT4R19GW	Ceramic Resonator	1	4.19 MHz
RY1	AEAWJZDC18A	Power Relay	1	(18V)
RY2,3,4,6	AEG5J1EG18B	Power Relay	4	(18V)
RY8	AEAWJXDC18G	Power Relay	1	(18V)
IC1	AEIC89745125	L.S.I. (MOS Microprocessor IC)	1	
IC5	AEICBA17805	I.C.	1	
IC6	MN1280	I.C.	1	
IC12	AEICBA12004	I.C.	1	
Q1,2	2SD2006-R	Transistor, Si, 1.2W	2	(100MHz)
Q3	UN4123	Transistor, Si, 300mW	1	
Q5,6,12,13,14,15	UN4111	Transistor, Si, 300mW	6	
Q7	2SA564A	Transistor, Si, 400mW	1	NN-3809, NN-3859 (200MHz)
Q7,30	2SA564A	Transistor, Si, 400mW	2	NN-3959 (200MHz)
Q8,22	2SC1685-R	Transistor, Si, 250mW	2	NN-3809, NN-3859 (150MHz)
Q8,22,31	2SC1685-R	Transistor, Si, 250mW	3	NN-3959 (150MHz)
Q9,25	2SC1318-R	Transistor, Si, 400mW	2	NN-3809, NN-3859 (200MHz)
Q10,20,23	UN4211	Transistor, Si, 300mW	3	
Q10,20,23,27,28	UN4211	Transistor, Si, 300mW	5	NN-3959
Q26	UN4223	Transistor, Si, 300mW	1	
D1,2,3	AEDNERA1502	Diode	3	NN-3809, NN-3859 Si, 2A
D1,2,3,6	AEDNERA1502	Diode	4	NN-3959 Si, 2A
D8,9,10,11,12,13,18,19,20,22,23,26,30,31,32,33,34,38,39,40,39	MA195	Diode	19	NN-3809, NN-3859 Si, 200mA
D5,7,8,9,10,11,12,13,18,19,20,22,26,27,30,31,32,33,34,38,39,40,41	MA195	Diode	23	NN-3959 Si, 200mA
ZD1,2	AEDZ9R1ES3T1	Zener Diode	2	
ZD3,4	AEDZ4R7ES3T1	Zener Diode	2	

ZD5	AEDZ15ES3T1	Zener Diode	1	
C1	ECEA1VU102E	Aluminium capacitor	1	1000µF, ±20%, 35V
C2	ECEA1VU331B	Aluminium capacitor	1	330µF, ±20%, 35V
C3	ECEA1VU471B	Aluminium capacitor	1	470µF, ±20%, 35V
C4	ECEA1VU104Z	Aluminium capacitor	1	NN-3959 0.1F, 5.5V
C5	ECEA1HUR47B	Aluminium capacitor	1	0.47µF, ±20%, 50V
C6,12	ECEA1CU220B	Aluminium capacitor	2	22µF, ±20%, 16V
C7	ECEA1EU101B	Aluminium capacitor	1	100µF, ±20%, 25V
C9,10,11,13,14,20	AECF055F104Z	Ceramic capacitor	6	(Multi layer) 0.1µF, -20%+80%, 50V
C17	ECBT1H101KB5	Ceramic capacitor	1	(Single layer) 100PF, ±10%, 50V
C18,23,24,27,28,29,32	ECBT1E103ZF5	Ceramic capacitor	7	NN-3809, NN-3859 (Single layer) 0.01µF, -20%+80%, 25V
C18,22,23,24,27,28,29,30,31,32,35,36	ECBT1E103ZF5	Ceramic capacitor	12	NN-3959 (Single layer) 0.01µF, -20%+80%, 25V
C19,21	ECBT1E223ZF5	Ceramic capacitor	2	(Single layer) 0.022µF, -20%+80%, 25V
R1,2	ERDS2TJ201T	Carbon film resistor	2	200Ω, ±5%, 1/4W
R3,9,25,33,36,37,40,41,43,82,83,84	ERDS2TJ103T	Carbon film resistor	12	NN-3809, NN-3859 10kΩ, ±5%, 1/4W
R3,9,25,33,36,37,40,41,43,55,58	ERDS2TJ103T	Carbon film resistor	11	NN-3959 10kΩ, ±5%, 1/4W
R5,8,22,42	ERDS2TJ102T	Carbon film resistor	4	1.0kΩ, ±5%, 1/4W
R6,20,39,70	ERDS2TJ104T	Carbon film resistor	4	100kΩ, ±5%, 1/4W
R16,17	ERDS2TJ101T	Carbon film resistor	2	100Ω, ±5%, 1/4W
R21,31,34,35,38	ERDS2TJ512T	Carbon film resistor	5	NN-3809, NN-3859 5.1kΩ, ±5%, 1/4W
R21,31,34,35,38,56,57	ERDS2TJ512T	Carbon film resistor	7	NN-3959 5.1kΩ, ±5%, 1/4W
R23	ERDS2TJ334T	Carbon film resistor	1	330kΩ, ±5%, 1/4W
R24	ERDS2TJ751T	Carbon film resistor	1	NN-3809, NN-3859 750Ω, ±5%, 1/4W
R24,73	ERDS2TJ751T	Carbon film resistor	2	NN-3959 750Ω, ±5%, 1/4W
R26	EROS2TKF5112	Metal oxide resistor	1	51.1kΩ, ±1%, 1/4W
R27,32	ERDS2TJ471T	Carbon film resistor	2	470Ω, ±5%, 1/4W
R28	ERDS2TJ914T	Carbon film resistor	1	910kΩ, ±5%, 1/4W
R61	ERDS2TJ470T	Carbon film resistor	1	47Ω, ±5%, 1/4W
R71	ERDS2TJ204T	Carbon film resistor	1	200kΩ, ±5%, 1/4W
Z1	AEXB08104T	Carbon film resistor	1	100kΩ × 8, ±5%, 1/8W
Z2	AEXB04104T	Carbon film resistor	1	100kΩ × 4, ±5%, 1/8W
Z4	AEXB15104T	Carbon film resistor	1	100kΩ × 15, ±5%, 1/8W

SERVICE FIXTURES AND TOOLS

EXTENSION CABLES

NOTE: To be used when repairing the DPC board assembly directly on the oven for easy access of the board.

Ref. No.	Part No.	Description	Pcs/Set	Remarks
	AT40M003	3 pin Extension Cable	1	Cable No. 36
	AT40M007	7 pin Extension Cable	1	NN-3809, NN-3859 Cable No. 37
	AT40K007	7 pin Extension Cable	1	Cable No. 42
	AT40M008	8 pin Extension Cable	1	Cable No. 38
	AT40L009	9 pin Extension Cable	1	Cable No. 44
	AT40M012	12 pin Extension Cable	1	NN-3959 Cable No. 43
	AT40E006	1 pin × 6 Extension Cable	2	Cable No. 9

Ref. No. E4 P.C.Board F assy

Ref. No.	Part No.	Description	Pcs/Set	Remarks
IC2	AEICBU4042	I.C.	1	
IC3,4	AEICBU4028	I.C.	2	
IC8,9	AEICBA12004	I.C.	2	
Q16	UN4111	Transistor, Si, 300mW	1	
D14,15,16,17	MA195	Diode	4	Si, 200mA
C25	AECF055F104Z	Ceramic capacitor	1	(Multi layer) 0.01µF, -20%+80%, 50V
Z3	AEXB04104J	Carbon film resistor	1	100kΩ × 4, ±5%, 1/3W
VR1	EVND2AA02B14	Volume Push switch	1	10kΩ
SW1,2,3,4,5,6,7,8,9,10,11,12,13	EVQQTGC5R		13	
L1,2,3,4,5,6,7,8,9,10,11,12	A61655110BP	Pilot lamp	12	